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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/756,426	01/14/2004	Tatsuya Tomioka	247527USOXDIV	6087

22850 7590 10/31/2006

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EXAMINER
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BUTTNER, DAVID J

ART UNIT	PAPER NUMBER
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1712

DATE MAILED: 10/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/756,426	TOMIOKA ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	David Buttner	1712	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 August 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,4,5,23,25,27,30-32 and 34 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,4,5,23,25,27,30-32,34 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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In order to have information considered by the office, an Information Disclosure Statement must be in compliance with the requirements of 37 CFR 1.97 and 1.98. Information submitted that does not comply with these requirements will not be considered but will be placed in the file (MPEP 609). The list of related cases are not proper information disclosure statements because there is no column for the examiner's initials and no heading that clearly indicates the list is an IDS for any particular application number. Note that MPEP 609.04(a) discusses the citation of pending US applications in an IDS.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1,4,5,23,25,27,30-32 and 34 rejected under 35 U.S.C. 103(a) as being unpatentable over Sakoda '799 in view of Okamoto '653.

Sakoda teaches polycarbonate substrates for optical discs (abstract). The polycarbonate has a Mv of about 14,300 and a Fe content of 0.2ppm or less (table 1). Fatty acid monoglycerides can be added at 0.005-0.1% (col 4 line 67). Inclusion of phosphorous antioxidants is suggested (col 3 line 44), but particular amounts are not taught. Sakoda does not report the free phenol content or acetone soluble content, but does teach washing the polycarbonate with acetone to remove unreacted components (col 3 line 36). This is the same technique applicant uses to remove excess free phenol

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(page 11 line 22 of spec). It is apparent from applicant's example I-1 and comparative example I-1 that the acetone washing step lowers the acetone soluble content of the resulting polycarbonate. It would have been obvious to wash the polycarbonate to remove free phenol to any extent desired. Less free phenol would result in a purer product. This washing inherently lowers the acetone soluble content also.

Okamoto (col 6 line 23; table 1) teaches typical amounts of phosphorous antioxidant in polycarbonate optical discs. It would have been obvious to employ the conventional amounts of phosphorous antioxidant in Sakoda's disc.

Claims 1,4,5,23,25,27,30-32 and 34 rejected under 35 U.S.C. 103(a) as being unpatentable over Sakoda '799 in view of Okamoto '653 and Otsubo '896.

The Sakoda/Okamoto combination does not teach to what degree the polycarbonate is washed to remove impurities and unreacted components.

Otsubo (abstract) teaches the acetone washing should extract enough bisphenol to leave less than 20ppm remaining. Such a high purity polycarbonate exhibits excellent performance as a optical disc substrate (col 1 line 44-46 of Otsubo).

It would have been obvious to extract enough phenol to leave less than 20ppm for the expected advantages.

Applicant's arguments filed 8/28/06 have been fully considered but they are not persuasive.

Applicant argues the three references are silent regarding the acetone soluble content.

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This is true. However, Otsubo's (example 1) washing of 100kg polycarbonate with 225kg acetone @ 50°C for one hour is the identical washing step applicant performs in example I-1. Applicant's washing step reduces the acetone soluble content from 14% to 8%. Applicant's comparison I-1 shows that no washing step results in a 13% acetone soluble content. It is apparent the acetone washing inherently lowers the acetone soluble content to the claimed level. Simply, choosing to measure and claim an unreported inherent property of an obvious composition or process does not require a finding of patentability.

Applicant argues the references do not suggest the proper MW, iron content, free phenol content, release agent content and antioxidant content.

This is clearly is not the case. The examiner has pointed out where the references suggest these limitations.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Buttner whose telephone number is 571-272-1084. The examiner can normally be reached on weekdays from 10 to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski, can be reached on 571-272-1302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

David Buttner

DAVID J. BUTTNER  
PRIMARY EXAMINER

10/27/06

